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CLAIMS

1.-12. (Canceled)

- 13. (Previously Presented) An implantable medical device comprising: a sensor for gathering physiological data related to sleep respiratory events:
 - a memory unit for storing the physiological data;
- a processor for extracting a sleep disordered breathing indicator data set including an average cycle length and a frequency of at least one of Cheyne-Stokes respiration and periodic breathing from the physiological data, and storing the data set in the memory unit; and
 - a telemetry device for transmitting the data set.
- 14. (Previously Presented) The medical device of claim 13, wherein the processor extracts arousals from the physiological data and stores the wake events in memory.
- (Previously Presented) The medical device of claim 13, wherein the 15. telemetry device permits interrogation of the memory.
- (Previously Presented) The medical device of claim 13, wherein the is an 16. intracardiac impedance sensor.
- 17. (Previously Presented) The medical device of claim 13, wherein the sensor is an intrathoracic impedance sensor.
- (Previously Presented) The medical device of claim 13, wherein the 18. sensor is a body movement sensor.

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- (Previously Presented) The medical device of claim 13, wherein the is an 19. oxygen sensor,
- (Previously Presented) The medical device of claim 13, wherein the 20. sensor is a pressure sensor.
- (Previously Presented) The medical device of claim 13, wherein the 21. memory unit is interrogated at predetermined intervals.
- (Previously Presented) An implantable medical device comprising: 22. a plurality of sensors for gathering physiological data related to sleep respiratory events;

a processor for extracting an average cycle length and a frequency of at least one Cheyne-Stokes respiration and periodic breathing from the physiological data, and storing the data in a memory unit; and

a telemetry device for externally transmitting sleep respiratory events from a processor in the medical device.

- 23. (Previously Presented) The medical device of claim 22, wherein the processor extracts arousals from the data corresponding to the sleep respiratory events.
- 24. (Previously Presented) The medical device of claim 22, wherein the sensor is an intracardiac impedance sensor.
- 25. (Previously Presented) The medical device of claim 22, wherein the sensor is an intrathoracic impedance sensor.
- 26. (Previously Presented) The medical device of claim 22, wherein the sensor is a body movement sensor.

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- (Previously Presented) The medical device of claim 22, wherein the 27. sensor is an oxygen sensor.
- (Previously Presented) The medical device of claim 22, wherein the 28. sensor is a pressure sensor.

29. ~ 36. (Cancelled)